

SECTION 12301

METAL CASEWORK

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Metal cabinet units and bases
- B. Countertops
- C. Cabinet hardware
- D. Preparation for installation of utilities
- E. Service fittings and outlets

1.2 DESIGN REQUIREMENTS

- A. Reinforce frame and support counters to safely support a load of 200 pounds concentrated on one square foot in any area with no indentation showing on surface and with permanent set not exceeding 0.005 inch.

1.2 SUBMITTALS

- A. Submit the following in accordance with the requirements of Section 01300.
  - 1. Catalog data indicating component dimensions, configurations, standard colors, construction details, hardware, and utility and service requirements and locations.
  - 2. Manufacturer's installation instructions.
  - 3. Shop drawings indicating materials, component profiles and elevations, assembly methods, joint details, fastening method, accessory listing and hardware locations.

1.3 QUALITY ASSURANCE

- A. Use products of a company that specializes in the manufacture of the products specified in this Section that has successfully completed at least 25 projects of the same size and scope as this project.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Kewaunee Scientific Corporation, GSA Program
- B. Fisher Hamilton Scientific Inc., Modular Steel

2.2 MATERIALS

- A. Use sheet steel conforming to ASTM A446, Grade D, stretcher leveled.
- B. Use safety glass conforming to ASTM C1048, FT-fully tempered, uncoated, Type 1 transparent, 1/8 inch thick minimum.
- C. Use countertops, backsplash and sidesplash made of machine finished, acid resistant

modified epoxy resin - Kewaunee "Kemresin".

- D. Use sealant at joints in countertops and splashes recommended by countertop material manufacturer.
- E. Use service fittings and fixtures as indicated on the Drawings.
  - 1. Use stainless steel cup sinks with waste fittings, [ ] inch diameter, [ ] inch deep.
  - 2. Use stainless steel trim escutcheons.
  - 3. Use stainless steel electrical outlet covers.

## 2.3 HARDWARE AND FITTINGS

- A. Hardware and fittings shall be manufacturer's standard items made of polished stainless steel or polished chrome plated steel.

## 2.4 FABRICATION

- A. Fabricate casework, assembled and welded.
- B. Fabricate corners and joints without gaps or inaccessible spaces where dirt or moisture could accumulate.
- C. Fabricate components of die formed sheet steel. Form each unit rigid, not dependent on adjacent units for rigidity.
- D. Form edges and seams smooth.
- E. Turn down edges of shelves 1 inch on each side and return 5/8 inch front and back.
- F. Electric spot weld casework, grind joints smooth and flush.
- G. Fabricate drawer and door fronts of sandwiched sheets of sheet steel and reinforced for hardware. Fill with sound deadening core.
- H. Fabricate countertops of full length material wherever possible.
- I. Component materials:
  - 1. Use 18 gage steel for front and back panels, gusset plates and rails.
  - 2. Use 20 gage sheet steel for drawers, door fronts, cabinet floors, shelves, filler panels and drawer dividers.
  - 3. Use 22 gage steel sheet for backing sheet to drawer and door fronts.
- J. Set glass in doors with gasket and removable stops to minimize rattles or vibration.
- K. Cut and drill countertops, backs and other components for service outlets and fixtures.
- L. Install fixtures and fittings built into or part of casework. Provide access panels for maintenance of utility service and mechanical and electrical components.

## 2.5 FINISHES

- A. Degrease and phosphate etch steel sheet materials, followed by primer and baked electrodeposited epoxy enamel.

- B. Shop finish all components.

## PART 3 EXECUTION

### 3.1 INSPECTION

- A. Verify presence of required utilities.
- B. Verify adequacy of support framing and anchors.

### 3.2 INSTALLATION

- A. Install casework, components and accessories in accordance with manufacturer's installation instructions.
- B. Use anchoring devices to suit conditions and substrate materials encountered.
- C. Set casework items plumb and square, securely anchored to building structure.
- D. Insulate to prevent electrolysis between dissimilar metals.
- E. Scribe to abutting surfaces and align adjoining components. Apply matching filler pieces where casework abuts dissimilar construction materials.
- F. Field touchup blemishes to match original finish.
- [G. Close joints in units and countertops and splashes with sealant.]

### 3.5 PROTECTION OF FINISHED WORK

- A. Protect finished casework from damage during continued construction activity.

END OF SECTION